CQ CHATTER

DECEMBER 2017 **VOLUME B17 • ISSUE 10**

WOOD COUNTY AMATEUR RADIO CLUB

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http://wcarc.bgsu.edu

CW Gets the Message Through in Wake of Hurricane Irma

from ARRL Letter

Any CW operator worth his or her salt will tell you that CW is the mode that gets through when all others fall short of the mark. CW certainly did the job for Chet Hogue, N3BK, who handled dozens of messages for residents of Florida's Lower Keys in the days following Hurricane Irma in September.

"A message from a Big Pine Key man to his girlfriend, who evacuated with their young daughter and was waiting to hear how he weathered the storm, was one of about 80 sent out over the airwaves by ham radio enthusiast Chet Hogue in the days following Irma's destruction," reporter Katie Atkins wrote in *The Keynoter* in describing Hogue's activity.

"Things here are still incredibly a mess!" Hogue told ARRL this week. The Summerland Key charter captain, known as "Captain Chester," weathered the storm in place. He noted that the primary frequencies handling traffic were quite busy, so he got on CW, which, he told Atkins, allowed him "to relay messages clearly." He operated from a station at his home as well as from his boat.

According to the news report, Hogue would transmit message traffic gathered from residents trying to get in touch with family and friends outside the area. He urged anyone interested in Amateur Ra-

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Kick-off Banquet Plans

The annual WCARC Kick-off banquet is planned for Sunday, January 7. In keeping with previous years, the location is J. Patrick's restaurant in the Holiday Inn French Quarter in Perrysburg, 10630 Fremont Pike (U.S. Rt. 20). The offering is a brunch buffet-style arrangement. Cost is: adult-$15, senior-$14, kids-$9, under 3-free. This is a chance to meet all the folks you talk to on the air in person. The announcement of the Officer slate and elections will also take place. ■

Net Check Ins

Nov 7 Traffic: 0

W8PSK (NCS)
KD8VWU
KG8FH
KD8NJW
WB8NQW
KA8VNG
N1RB
KD8RNO
KE8CVA
KC8NKC/M
K8BBK
KE8CUZ/M
WD8JWJ/M (13)

Nov 14 Traffic: 0

KD8NJW (NCS)
K8BBK
KE8CVA
WD8JWJ
KC8EKT
KG8FH/M
WB8NQW
W8PSK
KD8RNO
N1RB
KD8VWU
K8JU
KA8VNG (12)

Brain Teasers

1. What is the purpose of a gamma match used with Yagi antennas?

a.) to match the relatively low feed point impedance to 50 ohms

b.) to match the relatively high feed point impedance to 50 ohms

c.) to increase front-to-back ratio

d.) to increase main lobe gain

2. Why is it important to know the duty cycle of the mode you are using when transmitting?

a.) to aid in tuning the transmitter

b.) some modes have high duty cycles which could exceed the transmitter's average power rating

c.) to allow time for the other station to break in during a transmission

d.) all of the above are correct

3. What is the rms voltage across a 500 turn secondary winding in a transformer if the 2250 turn primary is connected to 120VAC?

a.) 2370 V

b.) 540 V

c.) 26.7 V

d.) 5.9V

December Contests

The contest lineup for the month of December is given below. Please note that the WARC bands (60, 30, 17 and 12 m) are never open to contesting.

Dec 1-3	*2200 to 1600 Z*	160 m
ARRL 160 meter 'test		**CW**
Dec 3	*0000 to 2359 Z*	10 m
10 meter RTTY 'test		**RTTY**
Dec 9-10	*0000 to 2359 Z*	10 m
ARRL 10 meter 'test		**CW/Phone**
Dec 16	*0000 to 2359 Z*	80 m to 10 m
OK/OM DX RTTY 'test		**RTTY**
Dec 16-17	*1400 to 1400 Z*	160 m to 10 m
Croatian CW 'test		**CW**
Dec 17	*1800 to 2359 Z*	80 m to 6 m
ARRL Rookie Roundup		**CW**
Dec 30	*0000 to 2359 Z*	160 m to 10 m
RAC (Canada) Winter 'test		**CW/Phone**
Jan 1	*0000 to 2359 Z*	160 m to 10 m
Straight Key Night		**CW**

December Hamfests

Dec 2 Fulton County ARC. Annual Hamfest. Delta Memorial Hall, Delta, OH. **web:** http://k8bxq.org/hamfest

Dec 3 L'Anse Creuse ARC. Annual Hamfest. Madison Place, Madison Hts, MI. **web:** http://www.n8lc.org

hurricane—from p. 1

dio to visit the ARRL website. “It’s just neat, this system,” he told Atkins. “With a piece of wire and a car battery, you can talk around the world.”

Hogue told ARRL that he “escaped” to the Keys in 2010 after recovering from an injury suffered in a vehicle accident. “I haven't been active in some time, but have kept my 'bug-out bag' ready for just this situation,” he said. “[This] was my first emergency, as it was for many who passed traffic for me.”

Hogue’s father — also Chester — is N3VA, and his dad and some of his friends got him interested in Amateur Radio. Hogue entered the military as a teenager and, he said, realized the vital importance of communication.

Hogue used a 100 W radio powered from deep-cycle marine batteries, a G5RV antenna on shore and a fiberglass vertical antenna on his charter boat. He kept a hand-written log on a piece of cardboard.

“This is a good reason for all of us to learn CW and use it on the bands, and become skilled at sending and receiving CW,” remarked Whitey Doherty, K1VV, who shared the news story with ARRL. ■

Solar minimum surprisingly constant

from phys.org/news

Using more than a half-century of observations, Japanese astronomers have discovered that the microwaves coming from the sun at the minimums of the past five solar cycles have been the same each time, despite large differences in the maximums of the cycles.

In Japan, continuous four-frequency solar microwave observations (1, 2, 3.75 and 9.4 GHz) began in 1957 at the Toyokawa Branch of the Research Institute of Atmospherics, Nagoya University. In 1994, the telescopes were relocated to NAOJ Nobeyama Campus, where they have continued observations up to the present.

A research group led by Masumi Shimojo, assistant professor at NAOJ Chile Observatory, including members from Nagoya University, Kyoto University, and Ibaraki University, analyzed the more than 60 years of solar microwave data from these telescopes. They found that microwave intensities and spectra at the minimums of the latest five cycles were the same every time. In contrast, during the periods of maximum solar activity, both the intensity and spectrum varied from cycle to cycle.

Masumi Shimojo says, "Other than sunspot observations, uniform long-term observations are rare in solar astronomy. It is very meaningful to discover a trend extending beyond a single solar cycle. This is an important step in understanding the creation and amplification of solar magnetic fields, which generate sunspots and other solar activity."

The sun goes through a cycle of active and quiet periods approximately once every 11 years. This "solar cycle" is often associated with the number of sunspots, but there are other types of solar activity, as well. So simply counting the number of sunspots is insufficient to understand the solar activity conditions.

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WCARC Weekly Net

Tuesdays at 2100 all year

147.18 MHz 67 Hz PL

Net Control Roster

Dec 5	*WB8NQW*
Dec 12	*N1RB*
Dec 19	*KD8VWU*
Dec 26	*KD8NJW*
Jan 2	*NM8W*
Jan 9	*K8OVO*
Jan 16	*WB8NQW*

NEXT MEETING

Business Meeting

Monday, Dec. 11th

TIME: 7:30pm/7:00e

PLACE:

Sheriff's Training Room
Dunbridge Rd. and E. Gypsy Lane Rd.
Bowling Green, OH

DON'T FORGET!

10 meter Net

meets

Sunday@ 2030

on 28.335 MHz

Time to Renew

WCARC

2018 membership dues are payable to:

WCARC Treasurer,
P. O. Box 534
Bowling Green,OH
43402

Net Check Ins

Nov 21 Traffic: 0

KD8VWU (NCS)
KE8CUZ
K8BBK
KC8EKT
KE8CVA
WB8NQW
W8PSK
KD8RNO
N8VNT
KA8VNG
N1RB
K8OVO (12)

Nov 28 Traffic: 0

WB8NQW (NCS)
KA8VNG
N1RB
KD8RNO
KD8NJW
K8BBK
KE8CVA
KG8FH
KC8EKT
W8PSK
KD8VWU
K8JU (12)

Brain Teaser answers: (G) 1-a, 2-b, 3-c

FCC Chairman Recognizes Amateur Radio in Assisting Puerto Rico

ARRL Letter

Wrapping up a 2-day visit to Puerto Rico on Monday, FCC Chairman Ajit Pai, recognized Amateur Radio volunteers in praising those who turned out to help the stricken Commonwealth in the wake of Hurricane Maria.

"The worst of tragedies can also bring out the best in people. I saw that firsthand during my 2 days in Puerto Rico," Pai said. "Everyone is pitching in: The people of Puerto Rico helping their neighbors, hard-working Federal Emergency Management Agency staff — including communications personnel in Emergency Support Function #2 — the dedicated regulators of the Puerto Rico Telecommunications Regulatory Board, and the FCC's own Roberto Mussenden, who has spent the past month away from his family on the mainland in order to help the island where he grew up."

"Additionally, Amateur Radio operators, broadcasters, cable operators, fixed wireless companies, wireline carriers, and mobile providers have stepped up to the plate, working overtime to connect the disconnected," Pai continued. "All of this work reflects the ethos I saw on many signs and t-shirts during my time on the island: 'Puerto Rico Se Levanta' [Puerto Rico is Rising]."

Pai said recovering from Hurricane Maria will require an all-hands-on-deck effort, and the FCC "remains committed to doing everything we can to help restore communications networks as quickly as possible." He also expressed his belief that that "more funding will be needed" in the months ahead.

In October, the FCC granted ARRL's request to waive current Amateur Radio rules to permit data transmissions at a higher symbol rate than currently permitted, in order to facilitate hurricane relief communications between the continental US and Puerto Rico.

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FCC chairman—from p. 6

The temporary waiver is limited to Amateur Radio operators in Puerto Rico using PACTOR 3 and PACTOR 4 emissions, and to those radio amateurs in the continental US who are directly involved with HF hurricane relief communications involving Puerto Rico or the US Virgin Islands, the Commission said at the time.

During his stay in Puerto Rico, Pai visited various parts of San Juan and towns along the northeastern coast. He also inspected a tower site and associated infrastructure on mountains in El Yunque National Forest. That infrastructure serves a critical role in providing connectivity in the eastern part of Puerto Rico, particularly for first responders.

While there, he met with President Sandra Torres López and Associate Member Alexandra Fernández Navarro of the Telecommunications Regulatory Board, attended a briefing hosted by FEMA and attended by staff from ESF-2, the Army Corps of Engineers, the National Weather Service, the Small Business Administration, and others, and with representatives from numerous communications entities, including fixed wireless providers and broadcasters.

"The path to recovery has met several challenges, most notably the lack of power and functional infrastructure," Pai said. "One thing is clear: Overcoming these challenges won't be easy." ■

solar—from p. 4

Microwaves are another indicator of solar activity. Microwaves, unlike sunspots, can be observed on cloudy days. Also, monitoring multiple frequencies of microwaves makes it possible to calculate the relative strength at each frequency. ■

Solar X-rays Oscillate D-Layer Ionosphere

A team of scientists led by solar physicist Laura Hayes, investigated a connection between solar flares and Earth's ionosphere. They discovered oscillating pulses in the D layer of the ionosphere at Low Frequency [transatlantic propagation at 24 kHz LF] mirrored X-ray and Extreme Ultraviolet (EUV) oscillations during a July 24, 2016 flare. It has now become clear that solar flares exhibit quasi-periodic pulsations with timescales of minutes at X-ray energies; it had not been previously known that the ionosphere is sensitive to this variability. Their results reveal that the Earth's ionosphere is more sensitive to small-scale changes in solar soft X-ray flux than previously thought. Modeling of the ionosphere shows that the D region electron density varies by up to an order of magnitude over the timescale of the pulsations (approximately 20 minutes). Their research article appears in JGR: Space Physics. ■

FOR SALE

Elecraft KX3 transceiver and Hardrock 50 W Amp. They go together. KX3 has the ATU, filter board, 2m module, internal bat charger/clock w/ batteries, microphone.

Amp has ATU, QSK. (qsk not installed). Many extra cables & plugs. Includes aluminum stand that will hold KX3 and PX3.
All manuals included.
Price $1300.
Contact:
Bill Wilkins, WD8JWJ, **wd8jwj@amplex.net**

FOR SALE

Heathkit SB-101 transceiver with power supply/speaker (SB-600/ HP-23A)—-receiver works, but no excitation—manuals included.
HD-1416 Code Oscillator with key
HD-15 Hybrid Phone Patch
HM-15 Reflected Power Meter

Asking $200 OBO
Contact:
Betsy Boyle (419) 392-6860 **betsyboylebg@gmail.com**

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